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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,834	08/04/2003	ByungKyu Kim	P/2292-76	5286

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EXAMINER

STRAIGHTIFF, MICHAEL PAUL

ART UNIT PAPER NUMBER

3739

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,834

Applicant(s)

KIM ET AL.

Examiner

Michael P. Straighttiff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9, 11, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 4-8, 10 and 14-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informalities: Page 1, Line 17 reads "the doctor cannot directly see an affected part to care the part" and should read -- the doctor cannot directly see an affected part to care for the part --. Page 3, Line 14 reads "Figure 4 is a perspective view showing a case that an suction unit" and should read -- Figure 4 is a perspective view showing a case that a suction unit --.

Appropriate correction is required.

Claim Objections

3. Claim 14 is objected to because of the following informalities: Claim 14, Line 5 reads "for making the upper plate slid" and should read -- for making the upper plate slide --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 11 recites the limitation "the bellows" in line 2. There is insufficient antecedent basis for this limitation in the claim. The claim, if instead dependent upon Claim 10, would have sufficient antecedent basis.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,662,587 to Grundfest et al.

a. In regard to Claim 1, Grundfest et al. discloses a device comprising "a body unit" (See Grundfest et al., Figure 1, See also Column 5, Lines 42-44), "a body movement control unit" (See Grundfest et al., Figures 5 and 12-15) "including a linear driving device" (See Grundfest et al., Column 9, Lines 37-40) and "wings which are unfolded from the outer circumferential surface of the body unit by operation of the linear driving device" (See Grundfest et al., Figure 5; See also Column 7, Lines 31-35; See also Column 9, Lines 28-31) and "a controlling unit installed in the body unit" (See Grundfest et al., Figure 1, Reference 52 "control bus", 54 "controller", 56 "receiver\transmitter"). The preambular language "micro capsule robot" without additional further structurally limiting

language (i.e. "swallowable", "able to be ingested", or other size scale) is given its broadest reasonable interpretation.

b. In regard to Claim 12, Grundfest et al. further discloses "wherein the number of body movement control units is constructed to be plural and disposed on the outer circumferential surface of the body unit in a radial direction of the body unit" (See Ng et al., Figures 5 and 12-15).

c. In regard to Claim 13, Grundfest et al. further discloses "wherein a length of the wing is changed according to the control signal of the controlling unit" (See Ng et al., Figures 12-15; See also Column 9, Lines 40-42).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,662,587 to Grundfest et al. in view of U.S. Patent No. 6,162,171 to Ng et al.

a. In regard to Claim 2, Grundfest et al. disclose a robotic endoscope (See Claim 1 Rejection). They do not meet the limitation "wherein the body unit includes a space for loading inner devices formed on center portion thereof". Ng et al. teach "wherein the body unit includes a loading space for loading inner devices formed on center portion thereof" (See Ng et al., Column 6, Lines 24-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an inner space in the endoscopic robot disclosed by Grundfest et al. as taught by Ng et al. in order to provide a space for other desired devices to be stored.

b. In regard to Claim 3, Grundfest et al./Ng et al. disclose a robotic endoscope (See Claims 1 and 2 Rejections). Grundfest et al. further disclose "wherein a camera device" (See Grundfest et al., Column 5, Lines 48-51), "a lighting device" (See Grundfest et al., Column 5, Lines 48-51), and "a sensor for recognizing movements of the body unit are installed on the loading space" (See Grundfest et al., Column 5, Lines 55-57).

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,662,587 to Grundfest et al. in view of U.S. Patent Application Publication US 2002/0042562 to Meron et al.

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a. In regard to Claim 9, Grundfest et al. disclose an endoscopic robot (See Claim 1 Rejection). Grundfest et al. do not meet the limitation "wherein suction portions which are fixed on inner wall of an organ when these are contacted to the inner wall of the organ are additionally installed on the end of the wings."

Meron et al. teaches "wherein suction portions which are fixed on inner wall of an organ when these are contacted to the inner wall of the organ are additionally installed on the end of the wings" (See Meron et al., Paragraph [0036], Lines 6-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a suction portion to be fixed on the inner wall of an organ as taught by Meron et al. on the wings disclosed by Grundfest et al. in order to effectively grasp the inner wall of an organ and immobilize an in vivo sensing system without damage to the delicate tissue of the inner wall of the organ.

Allowable Subject Matter

11. Claims 4 -8, 10, and 14-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Straighttiff whose telephone number is (703)

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308-3620. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MPS

A handwritten signature in black ink, appearing to be 'Linda C. M. Dvorak', enclosed within a large, loopy oval shape.

**LINDA C. M. DVORAK
SUPERVISORY PATENT EXAMINER
GROUP 3700**